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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
Ramakrishnan, et al.

Appl. No.: 10/724,274

Filed: November 26, 2003

For: **CHIMERIC AND HUMANIZED
ANTIBODIES OF ALPHA5BETA1
INTEGRIN THAT MODULATE
ANGIOGENESIS**

Art Unit: 1644

Confirmation No. 1255

Examiner: Not Yet Assigned

Atty. Docket: 05882.0178.NPUS01

Information Disclosure Statement

Mail Stop Amendments
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that had been cited by or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120. 1138 OG 37, 38 (May 19, 1992).

Applicants have checked the appropriate boxes below.

- 1. This Information Disclosure Statement is being filed;
 - ☐ a. Within three months of the U.S. filing date of a national application other than a continued prosecution application under §1.53(d);
 - ☐ b. Within three months of the date of entry of the national stage as set forth in §1.491 in an international application;
 - c. Before the mailing date of a first Office Action on the merits;
 - ☐ d. Before the mailing of a first Office Action after filing of a request for continued examination under § 1.115.

No statement under 37 C.F.R. § 1.97(e) or fee is required.

or;

- ☐ 2. This Information Disclosure Statement is being filed after the period specified in paragraph 1(a)-1(d) above, but before the mailing date of a Final Rejection or Notice of Allowance, or action that otherwise closes prosecution in the application, and
 - ☐ a. I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1), or
 - ☐ b. I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of

information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2), or

- ☐ c. Attached is our Check No. _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(p).
- ☐ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but on or before payment of the Issue Fee. Attached is our Check No. _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(i), and
 - ☐ a. I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1), or
 - ☐ b. I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☐ 4. Relevance of the non-English language document(s) is discussed in the present specification.
- ☒ 5. The document(s) was/were cited in a corresponding foreign application. An English language version of the foreign search report is attached for the Examiner's information.
- ☐ 6. A concise explanation of the relevance of the non-English language document(s) appears below:

- 7. The Examiner's attention is directed to co-pending U.S. Patent Application Nos. 10/090,331 filed Mar. 24, 2005, 10/818,068 filed Apr. 2, 2004, and 10/830,956 filed Apr. 23, 2004, each of which is directed to related technical subject matter. The identification of these U.S. Patent Applications is not to be construed as a waiver of secrecy as to these applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.
- 8. A copy of the document marked with an asterisk was submitted to the Office on June 28, 2005. Thus, a copy of this document is not attached. 37 C.F.R. § 1.98(d).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 08-3038 referencing docket number **05882.0178.NPUS01**.

Respectfully submitted,



Elisabeth Evertsz (Reg. No. 50,304)

Date: January 25, 2006

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| LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary) PTO FORM 1449 | ATTY. DOCKET NO. 05882.0178.NPUS01 | APPLICATION NO. 10/724,274 |
| | APPLICANT Vanitha Ramakrishnan, et al. | |
| | FILING DATE November 26, 2003 | GROUP 1653 |

| U.S. PATENT DOCUMENTS | | | | | | | |
|-----------------------|----|-----------------|------|------|-------|----------|-------------------------------|
| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
| | 1. | | | | | | |
| | 2. | | | | | | |
| | 3. | | | | | | |
| | 4. | | | | | | |

| FOREIGN PATENT DOCUMENTS | | | | | | | | |
|--------------------------|--|---|------------|---------|-------|----------|-------------|----|
| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
| | | PCT/US2004/010422 International search report | 02/08/2005 | PCT | | | YES | NO |

| OTHER REFERENCES | |
|--|---|
| (Including Author, Title, Date, Pertinent Pages, Etc.) | |
| 5. | Wu, H., et. al., "The Expression Of Integrin Alph5beta1 And Transforming Growth Factor-Beta In Pulmonary Fibrosis Of Rat" <i>Chinese Journal of Pathology</i> , <u>28</u> (6): abstract (1999) |
| 6. | Zhao, Ming Wei et. al., "A Distinct Integrin-Mediated Phagocytic Pathway For Extracellular Matrix Remodeling By RPE Cells: <i>Invest. Ophthalmol. Vis. Sci.</i> , <u>40</u> (11):2713-2723 (1999) |
| 7. | Wilson, Sylvia et. al., "Fibronectin Fragments Promote Human Retinal Endothelial Cell Adhesion and Proliferation and ERK Activation Through Alph5beta1 Integrin and PI 3-Kinase" <i>Invest. Ophthalmol. Vis. Sci.</i> , <u>44</u> (4):1704-1715 (2003) |
| 8. | Loike, J.D. et. al., "Blockade Of Alpha 5 Beta 1 Integrins Reverses The Inhibitory Effect Of Tenacin On Chemotaxis Of Human Monocytes And Polymorphonuclear Leukocytes Through Three-Dimensional Gels Of Extracellular Matrix Proteins" <i>Journal of Immunology</i> <u>166</u> (12):7534-7542 2001 |
| 9. | Kim, Semi et.al., "Regulation Of Integrin Alpha5beta3-Mediated Endothelial Cell Migration And Angiogenesis By Integrin Alpha5beta1 And Protein Kinase A" <i>Journal of Biological Chemistry</i> , <u>275</u> (43):33920-33928 (2000) |
| 10. | Grossniklaus, Hans et. al., "Immunohistochemical And Histochemical Properties Of Surgically Excised Subretinal Neovascular Membranes In Age-Related Macular Degeneration" <i>American Journal of Ophthalmology</i> <u>114</u> (4):464-472 (1992) |
| 11. | |
| 12. | |
| 13. | |
| 14. | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.